

**FACT SHEET FOR  
STATE WASTE DISCHARGE  
PERMIT NO. ST-9221**

**CURFMAN STEEL CORPORATION**

**INTRODUCTION**

This fact sheet is a companion document to the Draft State Waste Discharge Permit No. ST-9221. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the Port of Sunnyside Industrial Wastewater Treatment Facility (IWWTF). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities, which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A - Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C - Response to Comments.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION .....	1
GENERAL INFORMATION.....	3
BACKGROUND INFORMATION .....	3
DESCRIPTION OF THE FACILITY .....	3
Industrial Processes .....	4
PERMIT STATUS.....	4
SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT .....	4
WASTEWATER CHARACTERIZATION .....	5
PROPOSED PERMIT LIMITATIONS.....	5
TECHNOLOGY-BASED EFFLUENT LIMITATIONS .....	6
EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS .....	6
MONITORING REQUIREMENTS .....	6
OTHER PERMIT CONDITIONS .....	7
REPORTING AND RECORDKEEPING .....	7
OPERATIONS AND MAINTENANCE.....	7
PROHIBITED DISCHARGES.....	7
DILUTION PROHIBITED.....	7
GENERAL CONDITIONS .....	7
PUBLIC NOTIFICATION OF NONCOMPLIANCE .....	8
RECOMMENDATION FOR PERMIT ISSUANCE .....	8
APPENDIX A -- PUBLIC INVOLVEMENT INFORMATION.....	9
APPENDIX B -- GLOSSARY .....	10
APPENDIX C -- RESPONSE TO COMMENTS.....	13

<b>GENERAL INFORMATION</b>	
Applicant	Curfman Steel Corporation (Curfman)
Facility Name and Address	P.O. Box 977 521 Midvale Road Sunnyside WA 98944
Type of Facility:	Hot Roll Steel Mill
Facility Discharge Location	Latitude: 46° 18' 11" N Longitude: 120° 01' 09" W
Treatment Plant Receiving Discharge	Port of Sunnyside IWWTF
Contact at Facility	Ron Curfman – President (509) 837-6185
Responsible Official	Same

### **BACKGROUND INFORMATION**

Application has been made by Curfman Steel Corporation (Curfman) for a State Wastewater Discharge Permit to discharge pollutants to state waters via discharge to the Port of Sunnyside IWWTF, pursuant to the provisions of Chapter 90.48 Revised Code of Washington.

The Department of Ecology has tentatively determined to issue a discharge permit to the above applicant, subject to certain effluent limitations, which may require treatment facilities, schedules of compliance, and other conditions necessary to carry out the provisions of state law.

### **DESCRIPTION OF THE FACILITY**

This hot roll steel mill produces 25,000 tons of merchant bar from 30,000 tons of steel billets annually. The facility operates 12 hours a day, 3 days a week, 50 weeks per year. Eight employees are involved in the steel rolling process.

The industrial water used by this facility is supplied by the City of Sunnyside municipal system. Wastewater is discharged to the Port of Sunnyside (IWWTF) treatment system for subsequent spray application to crops grown on the Port sprayfield.

### **Industrial Processes**

Steel billets are trucked to the facility. Billets are heated in a reheat furnace to 2150°F, rolled, cooled to 1750°F in a water cooling spray, and cut into the finished product termed merchant bar. Use of water occurs mainly as steam evaporation; the remaining water returns to a recirculation tank where scale is settled out and the water recycled. Scrap metal and scale are recycled offsite. The finished product is trucked to the buyer. Wastewater discharge to the Port is a batch flow, and is metered. The discharge flow volume to the Port is intermittent averaging about 30 gallons per day. However, the facility requests a discharge flow of 2120 gallons per day to remain within permitted limits if total discharge to the Port is required to cope with unusual conditions at the plant.

### **PERMIT STATUS**

This new permit is being written using information in an application for a State Wastewater Discharge Permit submitted to the Department on June 5, 2000.

### **SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT**

Curfman is a new facility and has no compliance record. The facility was inspected on June 1, 2000.

Commercial/industrial discharges to the Port IWWTF are regulated by contract with the Port of Sunnyside. Limits have been developed for flow volume, COD, TSS and pH. User rates are based upon these measured parameters, and exceedances are subject to a surcharge. Contracted limits with the Port can be renegotiated when conditions at the plant or the IWWTF change for some reason.

Current contracted limits are shown below.

Hydraulic Discharge, monthly total

Month	Contracted, cubic feet	Peak, cubic feet	Total Suspended Solids, pounds/month	Chemical Oxygen Demand, pounds/month
January	2,450	*	25	100
February	2,450	*	25	100
March	2,450	3,675	25	100
April	2,450	3,675	25	100
May	2,450	3,675	25	100
June	2,450	3,675	25	100
July	2,450	3,675	25	100
August	2,450	3,675	25	100
September	2,450	3,675	25	100
October	2,450	3,675	25	100
November	2,450	*	25	100
December	2,450	*	25	100
Annual Total	29,400		300	1,200

**WASTEWATER CHARACTERIZATION**

The concentration of pollutants in the discharge reported in the permit application:

TSS – 652 mg/L maximum, pH – 7.7, COD 163 mg/L. The waste stream is grab sampled from a manhole just before the stream enters the Port industrial sewer system.

**PROPOSED PERMIT LIMITATIONS**

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants on the IWWTF (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the IWWTF.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

## **TECHNOLOGY-BASED EFFLUENT LIMITATIONS**

All waste discharge permits issued by the Department must specify conditions requiring all available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110).

Technology-based (categorical) standards for this industry are addressed in 40 CFR 420.70 Subpart G: Hot Forming Subcategory. Pretreatment Standards for New Sources (PSNS) are listed in 420.76. Federal regulations list no pretreatment standards for this category. Permit limits will be based upon local limits established with the IWWTF.

## **EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS**

In order to protect the Port of Sunnyside IWWTF from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by the Port and written into ordinance. Current monthly limitations are shown below and will form the basis for this State Wastewater Discharge Permit. Exceedances are subject to surcharges by the Port.

Flow 2450 cubic feet per month (18,343 gallons per month)  
COD 100 pounds per month  
Total Suspended Solids 25 pounds per month  
pH in the range 5 - 10

Pollutant concentrations in the proposed discharge with technology-based controls in place should not cause problems at the receiving IWWTF such as interference, pass-through or hazardous exposure to IWWTF workers nor should it result in unacceptable pollutant levels in the IWWTF's sludge.

## **MONITORING REQUIREMENTS**

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110). The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

## **OTHER PERMIT CONDITIONS**

### **REPORTING AND RECORDKEEPING**

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-216-110 and 40 CFR 403.12 (e), (g), and (h)).

### **OPERATIONS AND MAINTENANCE**

The proposed permit contains condition S.5. as authorized under RCW 90.48.110, WAC 173-220-150, Chapter 173-230 WAC, and WAC 173-240-080. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

### **PROHIBITED DISCHARGES**

Certain pollutants are prohibited from being discharged to the IWWTF. These include substances, which cause pass-through or interference; pollutants, which may cause damage to the IWWTF or harm to the IWWTF workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this, permit (Chapter 173-303 WAC).

### **DILUTION PROHIBITED**

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

### **GENERAL CONDITIONS**

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to treatment works permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance

with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

### **PUBLIC NOTIFICATION OF NONCOMPLIANCE**

The Department in a local newspaper may annually publish a list of all industrial users, which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

### **RECOMMENDATION FOR PERMIT ISSUANCE**

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

**APPENDIX A -- PUBLIC INVOLVEMENT INFORMATION**

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations, which are described in the rest of this fact sheet.

Public notice of application and draft permit (PNOA/D) was published on July 24, and July 31, 2000 in the Daily Sun News to inform the public that an application had been submitted and a draft permit and fact sheet were available for review and to invite comment on the reissuance of this permit.

Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator  
Department of Ecology  
Central Regional Office  
15 West Yakima Avenue, Suite 200  
Yakima, Washington 98902  
(509) 575-2821

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (509) 575-2821, or by writing to the address listed above.

This permit was written by C. S. Wallin.

## APPENDIX B -- GLOSSARY

**All Known, Available, and Reasonable Treatment (AKART)**—AKART shall represent the most current methodology that can reasonably be required for preventing, controlling, or abating the pollutants associated with a discharge. BMPs are considered a subset of the AKART requirement.

**Ammonia**—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

**Average Monthly Discharge Limitation**—The average of the measured values obtained over a calendar month's time.

**Best Management Practices (BMPs)**--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

**BOD<sub>5</sub>**--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD<sub>5</sub> is used in modeling to measure the reduction of dissolved oxygen in receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

**Bypass**—The intentional diversion of waste streams from any portion of the collection or treatment facility.

**Categorical Pretreatment Standards**—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a treatment works by existing or new industrial users in specific industrial subcategories.

**Compliance Inspection - Without Sampling**--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

**Compliance Inspection - With Sampling**--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

**Composite Sample**—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by

increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

**Construction Activity**—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

**Engineering Report**—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

**Grab Sample**—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

**Industrial Wastewater**—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

**Interference**—A discharge which, alone or in conjunction with a discharge or discharges from other sources, either: (1) inhibits or disrupts the treatment works, its treatment processes or operations, or its sludge processes, use or disposal; or (2) therefore is a cause of a violation of any requirement of the IWWTF's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal.

**Local Limits**—Specific prohibitions or limits on pollutants or pollutant parameters developed by a IWWTF.

**Maximum Daily Discharge Limitation**—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

**Method Detection Level (MDL)**--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

**Pass-through**—The discharge of pollutants through a municipal sewerage system into waters of the state in quantities or concentrations which are a cause or significantly contribute to a violation of any requirement of water quality standards for waters of the State of Washington, or of the NPDES permit or State waste discharge permit, including an increase in the magnitude or duration of the violation.

**pH**—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

**Quantitation Level (QL)**-- A calculated value five times the MDL (method detection level).

**Significant Industrial User (SIU)**--Industrial dischargers to a treatment works that have effluent limitations defined in a category (40 CFR 403.6 and 40 CFR Chapter I, subchapter N). However, the control authority may make a determination that even though an industrial user belongs to a category that has effluent limits for pretreatment, that industry is not a significant

industrial because there is no reasonable potential for affecting the IWWTF's operation. A SIU may also be any other industrial user that: 1. discharges an average of 25,000 gallons per day or more of process water, 2. makes up more than 5 percent of the average hydraulic flow (dry weather) or 5 percent of the organic capacity of the plant, or 3. the control authority believes has a reasonable potential to adversely affect the IWWTF's operation.

**Slug Discharge**—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the IWWTF. This may include any pollutant released at a flow rate, which may cause interference with the IWWTF.

**State Waters**—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

**Stormwater**—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

**Technology-based Effluent Limit**—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

**Total Coliform Bacteria**—A microbiological test, which detects and enumerates the total coliform group of bacteria in water samples.

**Total Dissolved Solids**—That portion of total solids in water or wastewater that passes through a specific filter.

**Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

**Water Quality-based Effluent Limit**—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

**APPENDIX C -- RESPONSE TO COMMENTS**

No comments were received.